

REMARKS/ARGUMENTS

Claims 23, 24, and 26-52 remain pending in the present application. The claim list is presented to reflect the current nature of the claims for the sake of clarity. Claims 48 and 49 are amended to correct a typographical error.

Applicants note the indication of the withdrawal of the rejection over Ezaki et al. in view of Lue et al., and thank the Examiner for his careful consideration of Applicants' comments in this regard.

Claims 23, 29-30, 44-46 and 51-52 have been rejected under **35 U.S.C. § 103(a)** as obvious over Garza et al. (U.S. Patent No. 5,707,751) in view of Branbilla (U.S. Patent No. 5,916,692). Applicants respectfully traverse this rejection and request reconsideration, since the references, even in combination, fail to disclose or suggest each and every claim limitation.

Garza et al. disclose a shrink film compositions having improved properties, particularly improved shrink range, optics, toughness, (low) shrink force, (low) extractables and the like. More specifically, the improved shrink films are directed to alloys or combinations comprising precise combinations of "narrow, substantially singular" melting point polyethylene with a higher melting point (by at least about 10°C.), polyethylene. (Abstract).

At page 2 of the final Office Action, the Examiner asserts:

With regard to Claims 23 and 51 - 52, Garza et al disclose a film comprising at least three layers (column 10, lines 12 - 17) comprising a core layer comprising 60-90% wt.% LDPE and 40-10 wt.% HDPE (column 4, lines 20 - 24) and an intermediate layer, comprising LDPE and LLDPE (column 10, lines 55 - 59) that is mLLDPE (Ziegler catalysts; column 3, lines 50 - 55). Garza et al fail to disclose 15% LDPE by weight and 85% by weight LLDPE. (Emphasis added).

Applicants respectfully traverse the Examiner's finding and submit that Garza et al. fail to disclose or suggest a core layer comprising 40-10 wt% HDPE, as claimed herein. At the location cited by the Examiner, Garza et al. state:

In one embodiment, the first component is a polyethylene and the second component is also a polyethylene. The second component can be a blend of LDPE, LLDPE and VLDPE in a weight ratio of about 2-25:50-98:0-25. (Col. 4, lines 20-24).

Clearly Garza et al. fail to disclose or even suggest HDPE in this passage.

The Examiner further cites to column 10, lines 55-59 of Garza et al., for the proposition that an intermediate layer can comprise LDPE and LLDPE. Applicants do not understand the Examiner's contention. At this point, Garza et al. state:

In an alternative multilayer embodiment of the present invention, the core layer, rather than the outer layer(s), comprise the critical "First Component/Second Component" material described above. In such an embodiment, at least one outer layer would comprise HDPE, LLDPE, LDPE, ULDPE, nylon, ionomer, EVOH, polyester, styrene polymers or copolymers, PVC, polypropylene, ethylene-propylene copolymers and/or polyvinylidene chloride. The more preferred outer layer(s) would comprise polypropylene, ethylene-propylene copolymer, LLDPE, LDPE, and/or polyester. The core layer would provide about 40% to about 95% of the total thickness of the multilayer film. Such a film structure would generally provide a broad shrink temperature range, and could also provide a broad shrink temperature range and could also provide low shrink force. (Emphasis added).

As highlighted above, Garza et al. propose that the core layer can comprise the "critical First Component/Second Component" material, neither of which can comprise HDPE. Looking closely at the Garza et al. disclosure, the "critical First Component" is clearly described to be a mLLDPE.

The first component is preferably the product of a polymerization process utilizing a single site or a constrained geometry catalyst (as opposed to traditional, multi-site catalysts). Single site or constrained geometry catalyst polyolefins are well known and are available from Exxon Chemical Co. under the trademark EXACT and are also available from Dow Chemical Company. (Col. 4, lines 14-20).

Another method of manufacturing useful "First Component" materials for the present invention is disclosed in a published European patent application EPO 0 416 815 A2 (publication number), 90309496.9 (application number), filed Aug. 30, 1990, "Constrained Geometry Addition Polymerization Catalysts, Processes For Their Preparation, Precursors Therefor, Methods Of Use, And Novel Polymers Formed Therewith" assigned to DOW Chemical. This publication discloses metal coordination complexes comprising a metal of Group III (except Sc), 4-10 or the lanthanide series and a delocalized pi-bonded moiety wherein the moiety is substituted with a constrain-inducing moiety which reduces the angle at the metal between the centroid of the pi-bonded moiety and at least one remaining substituent. The complexes preferably comprise a cyclopentadienyl or substituted cyclopentadienyl group forming part of a ring structure in which the metal is both bonded to an adjacent covalent moiety and held in association with the (substituted) cyclopentadienyl moiety. Complexes of said preferred structure are not necessarily constrained sufficiently to reduce the angle. Amidosilane and amidoalkanedyl compounds are particularly preferred. The complexes are from addition polymerization catalysts with activating cocatalysts such as Lewis acids, ammonium salts, oxidizing agents and, especially, aluminum compounds, particularly aluminum trialkyls. (Col. 6, lines 4-28; emphasis added).

In one preferred embodiment, the first component is further defined as comprising 50% to about 98% polyethylene having a density of about 0.86 to about 0.915 grams per cubic centimeter (all densities used within this specification are grams per cubic centimeter unless indicated otherwise) and a melt index between about 0.5 to about 2; (Col. 8, lines 23-28; emphasis added).

Undoubtedly the Examiner will recognize this manufacturing process as utilizing a metallocene catalyst, and the products as being low density polyethylenes. As such, Applicants submit it is clear that the "critical First Component" of Garza et al. is a metallocene catalyzed polyethylene, such as mLLDPE.

As to their "Second Component", Garza et al. disclose:

The preferred "Second Component" polyethylenes of the present invention are the linear low density (LLDPE), low density (LDPE) or the very low density polyethylenes (VLDPEs) most preferably LDPE. The most preferred comonomer for the LLDPE and ULDPE is octene. (Col. 6, lines 55-59).

...the second component of this embodiment is preferably present in an amount of about 2% to about 50% and is polyethylene having a density of about 0.915 to about 0.930 and a melt index of about 1.0 to about 10 (more preferably about 1.0 to about 3.0). Alternatively, the second component can be a VLDPE having a density of about 0.86 to about 0.90 in an amount of about 10% to 50%. (Col. 8, lines 29-35).

In yet another embodiment of the present invention, the film comprises 15% to about 35% Second Component which is polyethylene having a density of about 0.925 to about 0.945 and a melt index of from about 0.5 to about 1.5. About 65% to about 85% of the film is First Component polyethyene having a density of about 0.86 to about 0.92 and a melt index of about 1.0 to about 5.0. (Col. 8, lines 48-54).

Again, it is clear from these passages that Garza et al. fail to disclose HDPE as an option. As such, Applicants submit that the Garza et al. disclosure at column 10, lines 55-59 cannot be construed to support a core layer comprising HDPE.

In fact, upon Applicants' review, the only disclosure of Garza et al. relating to multilayer films containing HDPE is set forth at column 10, lines 55-56, wherein Garza et al. state that an outer layer can comprise HDPE:

In such an embodiment, at least one outer layer would comprise HDPE, LLDPE, LDPE...(emphasis added).

Accordingly, Applicants respectfully submit that Garza et al. never appear to disclose or suggest a core layer film comprising HDPE, as suggested by the Examiner. Further, as cited by the Examiner, Branbilla fails to cure this deficiency of Garza et al. At pages 2-3 of the final Office Action, the Examiner states:

Branbilla teaches a film having 15% LDPE by weight and 85% by weight LLDPE for the purpose of obtaining a film having good stretchability (column 2, lines 10 - 15). It therefore would have been obvious for one of ordinary skill in the art to provide for 15% LDPE by weight and 85% by weight LLDPE in order to provide a film having good stretchability as taught by Branbilla.

Clearly, this portion of the Examiner's assertions is entirely irrelevant to HDPE. Likewise, Applicants' reading of Branbilla reveals that it is entirely silent as to HDPE in a core layer thereof, and is directed only to mixtures of LLDPEs and LDPEs.

As such, Applicants submit that even in combination the cited references cannot meet each and every present claim limitation, and cannot therefore establish a *prima facie* case of obviousness as to the present claims. Withdrawal of the rejection is requested on this basis alone.

Claims 24, 26-28, 31-43, and 47-50 have been rejected under **35 U.S.C. § 103(a)** as obvious over Garza et al. in view of Branbilla and further in view of Lind et al. (U.S. Patent Publication No. 2001/0003624). Applicants respectfully traverse this rejection and request reconsideration, since the references, even in combination, fail to disclose or suggest each and every claim limitation.

Applicants reiterate their remarks in traverse of the application of Garza et al. and Branbilla as applied to the present claims, as set forth above.

Again, the secondary reference to Lind et al. fail to cure the underlying deficiencies of the combination of Garza et al. and Branbilla.

Withdrawal of the rejection and allowance of the claims is requested.

Appl. No.: 10/803,318
Atty. Docket No.: 2003B101A
Amdt. dated September 28, 2010
Reply to Final OA of August 4, 2010

Applicants invite the Examiner to telephone the undersigned attorney, if there are any issues outstanding which have not been presented to the Examiner's satisfaction. If necessary to affect a timely response, this paper should be considered as a petition for Extension of Time sufficient to affect a timely response. Please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1712 (Docket # 2003B101A-US).

Date: September 28, 2010

Respectfully submitted,

/Frank E. Reid/

Frank E. Reid
Attorney for Applicants
U.S. Reg. No.: 37,918

ExxonMobil Chemical Company
Law Technology
P.O. Box 2149
Baytown, Texas 77522-2149
(281) 834-1743 (Office)
(281) 834-2495 (facsimile)